SWMP Action Plan - June 2015

ID	Action	Туре	How	Location	SWMP Ref	SWMP Site Re	SWMP Area Name	No. of Properties at risk 1 in 30 year	No. of Properties at risk 1 in 75 year	No. of Properties at risk 1 in 200 year	Lead Organisation	Stakeholders	Costs	Benefits	Potential Funding Source	Timing
SWMP 01	Inspection and Maintenance	Maintenance	Inspection and maintenance of property protection and highway drainage works. Include on Asset Register	Cotswold Close to Miranda Close	В	4	Frankley	0	0		BCC Housing BCC Highways		Low	To maintain current standard of protection	Existing maintenance budgets	Ongoing
SWMP 02	Model Update	Investigation	Refine model to take account of works being undertaken at the Longbridge site.	Former MG Rover Site	С	6	Longbridge	2	3	6	BCC Drainage BCC Planning	St Modwen	Low	To improve representation of this area in the model and better understand the effect of the development on upstream and downstream flood risk.	Developer funding (S106/CIL) FDGIA Local Levy BCC Funding Application	2013-2023
SWMP 03	Inspection and Maintenance	Maintenance	Inspection and maintenance of highway drainage works in Exe Croft and Rednal Road. Include on Asset Register	31-37 Exe Croft	D	8	West Heath	0	0		BCC Drainage BCC Highways	STW	Low	To maintain current standard of protection	Existing maintenance budgets	Ongoing
SWMP 04	Inspection and Maintenance	Maintenance	Inspection and maintenance of highway drainage works in Pitclose and Houdley Road. Include on Asset Register	7-21 Pitclose	D	9	West Heath	0	0	0	BCC Drainage BCC Highways		Low	To maintain current standard of protection	Existing maintenance budgets	Ongoing
SWMP 05	Inspection and Maintenance	Maintenance	Inspection and maintainence of exceedence flow pathway	Bushwood Road	Е	11	Bournville	2	4	6	BCC Drainage	BCC Parks	Low	To maintain current standard of protection	BCC Rivers and Brooks	Ongoing
SWMP 06	Feasibility	Investigation	Investigate storage options on The	The Bourn (Woodbrooke Road to Cadburys)	E	13	Bournville	2	3	8	EA	BCC Drainage Cadburys Bournville Village Trust	Low	To determine if a viable scheme can be developed to mitigate flooding	FDGIA Local Levy Third Party Contributions	2015-2022
SWMP 07	Inspection and Maintenance	Maintenance	Inspection and maintenance of flood defence wall to rear of Oxford Street properties	Oxford Street, Bond Street	F	14	Selly Park	38	38	40	EA		Low	To maintain current standard of protection	Existing maintenance budgets	Ongoing
SWMP 08	Inspection and Maintenance	Maintenance	Inspection and maintenance of storage and upsized sewers.	Ripple Road, Pershore Road	F	16	Selly Park	45 (38)	60 (50)	60 (50)	STW	EA BCC Drainage	Low	To maintain current standard of protection	Severn Trent Water	Ongoing
SWMP 09	Model update	Investigation	Flood alleviation scheme. Scheme to be modelled in SWMP model to assess residual risk.	Ripple Road, Pershore Road	F	16	Selly Park	n/a	n/a	n/a	BCC Drainage	STW EA	Low	To understand residual risk from scheme and determine whether further works are necessary.	Partnership through Strategic Board	2015
SWMP 10	Feasibility	Investigation	Pebble Mill Playing Fields	Selly Park South	F	17	Selly Park	38	60	107	EA		Low	To determine if a viable scheme can be developed to mitigate flooding	FDGIA Local Levy	2015-2022
SWMP 11	Feasibility	Investigation	Investigate capacity of Mill Lane culvert and feasibility of storage at Senneleys Park	Stonehouse Brook (Mill Lane)	G	18	Selly Park	6	7	9	EA	BCC Housing BCC Highways	Low	To determine if a viable scheme can be developed to mitigate flooding	FDGIA Local Levy	2015-2022
SWMP 12	Feasibility	Investigation	Assess feasibility of storage on Harbourne Golf Course	Harts Green Brook Corridor	G	20	Selly Oak	0	5	7	BCC Drainage	BCC Leisure	Low	To determine whether there is a cost beneficial scheme.	FDGIA Local Levy	2015-2022
SWMP 13	Inspection and Maintenance	Maintenance	Inspection and Maintenance of Arosa Drive culvert and Harts Green Brook Channel	Harts Green Brook Corridor	G	21	Selly Oak	incl. in above	incl. in above	incl. in above	BCC Drainage		Low	To maintain current standard of protection	Revenue Budget	Ongoing
SWMP 14	Community Level Flood Mitigation	Mitigation	Flood mitigation scheme to re-route flows, provide surface water storage and implement property level protection	Alwold Road/Corrisande Road/Weoley Avenue	G	23	Selly Oak	15	18	35	BCC Drainage	STW	Medium	To reduce flood risk to properties in Alwold Road, Corrisande Road and Weoley Avenue	FDGIA Local Levy Severn Trent Water	2016-2017
SWMP 15	Inspection and Maintenance	Maintenance	Establish regime for regular inspection and maintenance of drainage in Lodge Hill Cemetery	Lodge Hill Cemetery	G	24	Selly Oak	incl. in above	incl. in above		BCC Bereavement Services		Low	Contributes to mitigating surface water flows	Cemetery Maintenance budget	Ongoing
SWMP 16	Feasibility	Investigation	Investigate the need for management of exceedence flows	Gibbins Road/Harborne Lane	G	26	Selly Oak	7	11	16	BCC Drainage	BCC Highways	Low	To determine whether properties are at risk and hence whether a scheme needs to be promoted		2015 - 2025
SWMP 17	Investigation	Investigation	Investigate if parts of surface water system are not mapped or modelled.	Tiverton Road	G	27	Selly Oak	34 (10)	79 (13)	102 (15)	STW		Low	To determine if the surface water issue identified can be atributed to surface water sewer capacity and to determine best way forward to mitigate against risk to properties.	Severn Trent Water	2014-2016
SWMP 18	Feasibility	Investigation	Assess both upstream and downstream effects of reprofiling Eastern Road Bridge and increasing its capacity as this structure has been identified as being susceptible to blockage	77 - 85 Eastern Road	G	28	Selly Oak	15	24	32	EA	BCC Highways	Low	To determine if a viable scheme can be developed to mitigate flooding	FDGIA Local Levy	2015-2022
SWMP 19	Feasibility	Investigation	Bourn Brook.	Selly Park North	G	29	Selly Oak	32	43	50	EA	BCC Highways BCC Parks Calthorpe Estates	Low	To determine if a viable scheme can be developed to mitigate flooding	FDGIA Local Levy Third Party Contributions	2015-2022
SWMP 20	Inspection and Maintenance	Maintenance	Inspection and maintenance of highway scheme in Cheddar Road. Include on Asset Register	Cheddar Road	Н	30	Edgbaston	14 (0)	24 (0)	53 (14)	BCC	BCC Drainage BCC Highways	Low	To maintain current standard of protection	Existing maintenance budgets	Ongoing

SWMP Action Plan - June 2015

ID	Action	Туре	How	Location	SWMP Ref	SWMP Site Ref	SWMP Area Name	•	No. of Properties at risk 1 in 75 year	No. of Properties at risk 1 in 200 year	Lead Organisation	Stakeholders	Costs	Benefits	Potential Funding Source	Timing
SWMP 21	Data improvement	Investigation	Improve coverage of surface water sewer system in model	Belgrave Road area	Н	31	Edgbaston	6	7	8	STW	BCC Drainage	Low	To allow coverage of surface water network to be improved in integrated model and hence gain a better understanding of flood risk in this area.	Severn Trent Water	2014-2016
SWMP 22	Feasibility	Investigation	Investigate opportunities to open up access to river and possibility of widening channel as part of Southern Gateway redevelopment	Southern Gateway Area	ı	32	Digbeth	8	10	20	BCC Planning	EA BCC Drainage STW	Low	To determine if a viable scheme can be developed to mitigate flooding	Developer funding S106/CIL FDGIA Local Levy	2014-2017
SWMP 23	Southern Gateway Area Action Plan	Policy	Southern Gateway planning policies on River Rea and surface water management/SUDS	Southern Gateway Area	I	32	Digbeth	incl. in above	incl. in above	incl. in above	BCC Planning	EA BCC Drainage STW	Low	To reduce flood risk to new development and existing catchment by appropraite management of flows	0 0	2014-2017
SWMP 24	Data improvement	Investigation	Improve data on surface water network with information from STW model when available	Glover Street	I	33	Digbeth	0	0	3	BCC Drainage	STW	Low	To allow coverage of surface water network to be improved in integrated model and hence gain a better understanding of flood risk in this area.	Revenue Budget	2014-2016
SWMP 25	Data improvement	Investigation	Improve data on surface water network with information from STW model when available	Lawley Middleway, Landor Street	I	34	Digbeth	0	1	7	BCC Drainage	STW	Low	To allow coverage of surface water network to be improved in integrated model and hence gain a better understanding of flood risk in this area.	Revenue Budget	2014-2016
SWMP 26	Investigation	Investigation	Assess likely overland flow routes	Network Park, Crawford Street	J	35	Saltley	2	2	2	BCC Draiange		Low	To improve confidence in model results and determine whether a scheme needs to be promoted.	Revenue Budget	2014-2016
SWMP 27	Data improvement	Investigation	Improve data on surface water network and CSO schemes	Upstream of Ninevah Road	к	36	Hockley	0	50+ (0)	80+ (0)	STW	BCC Drainage	Low	To allow coverage of surface water network to be improved in integrated model and hence gain a better understanding of flood risk in this area.	Severn Trent Water	2014-2016
SWMP 28	Data improvement	Investigation	Improve representation of Thimblemill Brook in integrated model by working with Sandwell Metropolitan Borough Council to share data	Upstream of Ninevah Road (Sandwell)	К	37	Hockley	0 (0)	5 (0)	11 (0)	BCC Drainage	Sandwell MBC	Low	To improved integrated model and hence gain a better understanding of flood risk in this area.	FDGIA Local Levy BCC Funding Application	2014-2016
SWMP 29	Model refinement	Investigation	Refine model to reflect conditions on site	Ninevah Road & Grassmere Road	К	38	Hockley	0	20+ (6)	50+ (12)	BCC Drainage		Low	To achieve better understanding of the the flood risk to properties in this area.	Revenue Budget	2014-2016
SWMP 30	Investigation	Investigation	Assess surface water risk following model refinement	Factory Road	К	39	Hockley	0 (0)	20 (6)	50 (20)	BCC Drainage		Low	To assess risk to proprties following upstream modifications to the model with a view to identifying whether a scheme needs to be promoted.	Revenue Budget	2014-2016
SWMP 31	Data improvement	Investigation	sewer system in model	Burbery Park / Farm Croft	К	40	Hockley	1 (0)	8 (8)	33 (12)	STW	BCC Drainage	Low	To allow coverage of surface water network to be improved in integrated model and hence gain a better understanding of flood risk in this area.	Severn Trent Water	2014-2016
SWMP 32	Inspection and Maintenance	Maintenance	5 yearly inspection and maintenance of channel	Hockley Brook	К	41	Hockley	n/a	n/a	n/a	BCC Drainage		Low	Based on level of risk from detailed survey	Revenue Budget	Ongoing
SWMP 33	Investigation	Investigation	Improve representation of Handsworth Pool in model	Church Hill Road	L	43	Handsworth	10 (0)	12 (0)	13 (1)	STW	BCC Drainage	Low	To improve understanding of how level in pond affects flow in downstream surface water sewers.	Severn Trent Water	2014-2016
SWMP 34	Tame Flood Scheme	Mitigation		Witton Road (Railway) Tame Road areas	М	47	Birchfield	80 (60)	82 (62)	90 (70)	EA	BCC Draiange STW	High	To ensure that when the Perry Barr & Witton Flood Scheme is implement any residual surface water flood risk is appropriately managed.	FDGIA	2014-2016
SWMP 35	Inspection and Maintenance	Maintenance	Inspect and maintain culverts at Knowles Drive, Balckroot Road and Anderson Close	Knowles Drive, Balckroot Road and Anderson Close	N	48	Four Oaks	incl. in above	incl. in above	incl. in above	BCC Drainage	Railtrack	Low	To maintain current standard of protection	Revenue Budget	Ongoing
SWMP 36	Inspection and Maintenance	Maintenance	Inspection and desilting of Clifton Road bridge	Clifton Road area	0	49	Sutton Coldfield	n/a	n/a	n/a	BCC Drainage		Low	To maintain current standard of protection	Revenue Budget	Ongoing
SWMP 37	Inspection and Maintenance	Maintenance	Inspection and riparian maintenance	Clifton Road area	0	49	Sutton Coldfield	n/a	n/a	n/a	BCC Drainage	Riparian owners	Low	To maintain current standard of protection	Revenue Budget	Ongoing
SWMP 38	Highway Maintenance	Maintenance	Maintenance of Highway Drainage	Citywide				n/a	n/a	n/a	Amey	всс	Low	To ensure gullies and connections are fully functioning and hence mitigate against surface water flooding	BCC Highways PFI	Ongoing

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Appendix 3 - Surface Water Management Plan

ID	Action	Туре	How	Location		SWMP Site Ref	SWMP Area Name	Properties at risk 1 in 30	Properties at risk 1 in 75	No. of Properties at risk 1 in 200 year	Lead Organisation	Stakeholders	Costs	Benefits	Potential Funding Source	Timing
SWMP 39	Highway Maintenance	Maintenance	Look at potential to increase highway gully cleansing frequencies in high risk areas	SWMP Local Flood Risk Areas	A-O		All	n/a	n/a	n/a	Amey	BCC	Low	To ensure gullies and connections are fully functioning and hence mitigate against surface water flooding	BCC Highways PFI	2015-2016
SWMP 40	Grill Maintenance	Maintenance	Maintenance of all grills on watercourses	Citywide				n/a	n/a	n/a	BCC	EA	Low	To mitigate against blockage and therefore flood risk	BCC & EA Maintenance budgets	Ongoing
SWMP 41	Investigation	Investigation	Assess locations where leaf fall coincides with surface water flood risk	SWMP Local Flood Risk Areas	A-O		All	n/a	n/a	n/a	BCC Drainage	BCC Fleet & Waste	Low	To mitigate against bloackage of gullies and therefore reduce surface water flood risk	Revenue Budget	2014-2015
SWMP 42	Investigation	Investigation	Residual and resultant risk from Sparkhill proposals	Upper Cole catchment				To be determined	To be determined	To be determined	BCC Drainage	EA	Low	To understand properties at risk in Upper Cole catchment and develop proposals for appropraite mitigation	Revenue Budget	To be determined dependent on Sparkhill timescales
SWMP 43	Awareness	Communication	To raise awareness of the issues of discharging fats, oils and greases nito the sewer network	Citywide	To be determi ned		To be determined	n/a	n/a	n/a	STW	BCC	Low	To minimise blockage in the foul and combined sewer systems which can in some locations lead to surface water flooding	Severn Trent Water	Ongoing
SWMP 44	Consultation	Communication	To communicate outputs of SWMP with the community	Citywide				n/a	n/a	n/a	BCC Drainage		Low	To ensure community ios aware of flood risk and actions that can be taken to address the risk	Revenue Budget	2015-2016

## Notes:

X (Y) means X properties modelled as at risk, Y re-assessed after site visit.

Estimated costs are based on the following bands

	Per Property
Low	< £7000
Medium	£7000 > £15000
High	> £15000

Revenue budget assumes Rivers and Brooks budget plus funding for new duties

## Cells to be completed

BCC
EA
STW